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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DIVINE, LUCAS

ART UNIT PAPER NUMBER

2624

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/892,422

Applicant(s)

HOBEROCK ET AL.

Examiner

Lucas Divine

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 26 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 6 – 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, which depends from claim 4, claim 6 recites the limitation "**the flexible sheet**" in page 9 line 6. There is insufficient antecedent basis for this limitation in the claim. None of the parent claims discuss a sheet of any kind, including that of a flexible sheet. Therefore claim 6 is vague and indefinite for failing to particularly point out and distinctly claim that which the applicant regards as the invention.

Regarding claims 7 and 8, which depend from claim 6, these claims inherit rejected limitations from parent claim 6 and are rejected for the same reasons.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Tadokoro et al. (US 4819078) hereafter referred to as Tadokoro.

Regarding claim 18, Tadokoro teaches a **presentation system comprising:**

**a presentation board** (Fig. 5 ref. no. 1A) **adapted to display an image for simultaneous viewing by a plurality of viewers** (Tadokoro teaches the use of the electronic print board at conferences [col. 1 line 64]), **the presentation board comprising:**

**a writing surface** (col. 2 line 12, wherein an image can be erasably written manually onto the drawing medium); **and**

**a printer disposed to print onto the writing surface** (write device 14, col. 3 lines 12-14);

**an electronic image** (electronic image is image data [col. 5 line 34] transferred to the controller 7 by one of the input/storage devices [22a-d, col5 lines 26-33]); **and**

**a processor adapted to transmit the electronic image to the printer** (controller 7 which controls the entire electronic print board system receives the image data and sends it to printer 14A).

Regarding claim 23, Tadokoro teaches a **method for creating an image to be viewed during a presentation comprising:**

**obtaining, in electronic form, the image to be viewed** (Fig. 5, image data is retrieved from input/storage devices 22a-d by the controller 7 based on a user selection on the operator panel 12; col. 5 lines 26-35 and col. 2 lines 23-25);

**sending the image to a presentation system including a printer (14A) with a printhead** (writing device 14A comprises a print head as taught in col. 5 lines 58-59) **adapted to print onto a writing surface** (col. 2 lines 23-25 and col. 5 lines 38-40, wherein it is inherent that

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the controller sends the received image data to write device 14A in order to complete the printing/writing function on the sheet display); and

**printing the image on the writing surface** (col. 2 lines 19-25 and col. 5 lines 38-40 teach the writing of the image data onto the writing surface of the presentation board).

Regarding claim 25, which depends from claim 23, Tadokoro further teaches **scanning an image on the writing surface** (col. 2 lines 15-16, col. 2 lines 19-22, col. 3 lines 8-11),

**saving the scanned image in electronic form** (col. 3 lines 10-11, wherein the controller then saves the image data in single screen memory 17 or memory 8 and can further copy it later into hard drive 22b or floppy drive 22a or to personal computer 22c), and

**printing the scanned image on the writing surface at a later time** (col. 5 lines 25-40 teach the saved image data can be reprinted out from the storage/input devices; further discussed in col. 6 lines 10-17 and col. 2 lines 10-20).

3. Claims 1 and 12 – 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruce-Sanders (US 4429478).

Regarding claim 1, Bruce-Sanders teaches a **presentation system** (Fig. 1) **comprising:**  
**a writing surface (10A) coupled with a frame (20), the writing surface being adapted to receive erasable ink** (dry erase ink; col. 4 line 9); and

**a printer coupled with the frame** (carriage 12 performs printing across the board), **the printer including a printhead** (print heads 14) **configured to print an image on the writing surface with erasable ink** (image shown in Fig. 1 as being printed with dry erase ink).

Regarding claim 12, which depends from claim 1, Bruce-Sanders teaches **an eraser adapted to erase the writing surface** (erase roller 16; col. 4 lines 20-22).

Regarding claim 13, which depends from claim 12, Bruce-Sanders teaches **the eraser is adapted to traverse the writing surface** (col. 6 lines 52-54).

Regarding claim 14, which depends from claim 12, Bruce-Sanders teaches **wherein the writing surface is adapted to move past the eraser** (Figs. 8 and 9 show how the surface can be rotated past the eraser).

Regarding claim 15, which depends from claim 1, Bruce-Sanders teaches **a processor having memory** (CPU 100 and memory 101), **the processor being in communication with the printer** (print commands to interface 105) **and adapted to provide an image to the printer to be printed on the writing surface** (Fig. 7 shows the command signals used to control the carriage for printing an image that has been retrieved from memory, see cols. 7 and 8).

Regarding claim 16, which depends from claim 1, Bruce-Sanders teaches **the erasable ink is dry-erase ink** (col. 4 line 8).

Regarding claim 17, which depends from claim 1, Bruce-Sanders teaches **the writing surface is 2' x 3' or larger** (it is inherent by the definition of the writing surface as a sign and from the figures that the writing surface is larger than 2'x 3').

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruce-Sanders as applied to claim 1 above, and further in view of Cotter (US 3873769).

Regarding claim 2, which depends from claim 1, while Bruce-Sanders teaches multiple print heads on a carriage, Bruce-Sanders does not specifically teach that **the printhead is adapted to move along a traverse rail**.

Cotter teaches a **printhead that is adapted to move along a traverse rail printhead is adapted to move along a traverse rail** (printhead 36 moving up and down a rail shown in Fig. 1).

It would have been obvious to one of ordinary skill in the art that the system of Bruce-Sanders could have one print head moving along a rail instead of multiple stationary print heads. The motivations for supplying only one device instead of multiple would be cost and control. It would be easier to control one printhead instead of programming control for multiple all printing at the same time. Also it would be less expensive to buy 1 printhead as opposed to a plurality.

Regarding claim 3, which depends from claim 2, Bruce-Sanders teaches that **the rail traverses the writing surface** (col. 6 lines 52-54 and shown in Figs. 1 and 2).

Regarding claim 4, which depends from claim 2, Bruce-Sanders teaches that **the writing surface is adapted to move past the printhead** (Figs. 8 and 9 show how the writing surface can be moved past the printhead).

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Regarding claim 5, which depends from claim 4, Bruce-Sanders teaches that **the writing surface is a flexible sheet configured for selected passage past the printhead** (as shown in Fig. 9, the writing surface must be flexible to be rotated past the printheads).

Regarding claim 6, which depends from claim 4, Bruce-Sanders teaches a **roller mechanism configured to engage the flexible sheet to pass the flexible sheet past the printhead** (roller mechanisms shown in Fig. 9)

Regarding claim 7, which depends from claim 6, Bruce-Sanders teaches that **the flexible sheet forms a continuous loop** (Fig. 9).

Regarding claim 8, which depends from claim 6, Bruce-Sanders teaches that **wherein the rollers are motor-driven and adapted to rotate the rollers such that the writing surface is moved past the printhead** (Fig. 9, the rollers rotated by motor 128 moving the surface 110 past the printheads 114).

5. Claims 9 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruce-Sanders as applied to claim 1 above, and further in view of Takayama et al. (US 4587568), hereafter referred to as Takayama.

Regarding claim 9, which depends from claim 1, Bruce-Sanders does not teach a **scanner**.

Takayama teaches a scanner (image sensor 20) which scans the image off of a presentation board shown in Fig. 2 that is very similar to the printing presentation system of Bruce-Sanders Figs. 8 and 9.



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It would have been obvious for one of ordinary skill in the art to scan an image on a presentation board for the reasons stated in col. 1 of Takayama, including that the image that was written or printed can now be saved and reprinted by a second printer for printing handouts etc..., thus instead of a person having to take down the meeting notes written on such a board, the information can be scanned and transmitted or printed.

Regarding claim 10, which depends from claim 9, as shown in Fig. 2, Takayama teaches **that the scanner is adapted to scan the writing surface.**

Regarding claim 11, which depends from claim 10, Takayama teaches **an attached second printer in communication with the scanner** (printer 22 prints out the scanned images; col. 2 lines 66-68).

6. Claims 19 – 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadokoro as applied to claims 18 and 23 above, and further in view of Bruce-Sanders.

Regarding claim 19, which depends from 18, while both Tadokoro and Bruce-Sanders teach **writing surfaces is adapted to receive erasable ink** (Tadokoro teaches that images can be erasable written manually, it is implied that ink is written on the surface and Bruce-Sanders teaches a display board that is printed on with erasable ink [col. 4 line 12, wherein if dry erase ink can be used to print on a surface, that surface can also be written on with the same ink]), Tadokoro does not specifically teach that **the printhead is adapted to print with erasable ink.**

Bruce-Sanders teaches **printheads adapted to print with erasable ink** (print heads 14 that contain dry erase ink for printing on the presentation board/sign; col. 4 lines 8-10).

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It would have been obvious to one of ordinary skill in the art that the system of writing on the surface of a presentation board of Tadokoro could have been completed in erasable ink. The motivations for providing ink for printing because ink is a simple, uncomplicated, and energy efficient alternative to the high powered, complicated heat printing system of Tadokoro. Bruce-Sanders first taught using erasable ink on 2-7-1984 and so using erasable ink on signs and boards has been shown in the art to be effective and useful and other motivations for printing using erasable ink are known in the art.

Regarding claim 20, which depends from claim 19, Bruce-Sanders teaches that **the erasable ink is dry-erase ink** (print modules 14 use dry erase ink; col. 4 lines 8-17).

Regarding claim 21, which depends from claim 19, Tadokoro teaches the system **including a scanner** (document reader 13).

Regarding claim 22, which depends from claim 19, Tadokoro teaches the system **including an eraser** (write device 14 performs erasing functions; col. 3 lines 45-49 and lines 66-67).

Regarding claim 24, which depends from claim 23, while Tadokoro teaches a board that can receive ink (col. 2 lines 12-13, wherein image can be erasably written manually, wherein images written manually are implied to be written in ink), Tadokoro does not teach the **printer to print images in dry-erase ink**.

Bruce-Sanders teaches a **printer adapted to print images in dry-erase ink** (print modules 14 use dry erase ink; col. 4 lines 8-17).

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It would have been obvious to one of ordinary skill in the art that the system of writing on the surface of a presentation board of Tadokoro could have been completed in erasable ink. The motivations for providing ink for printing because ink is a simple, uncomplicated, and energy efficient alternative to the high powered, complicated heat printing system of Tadokoro. Bruce-Sanders first taught using erasable ink on 2-7-1984 and so using erasable ink on signs and boards has been shown in the art to be effective and useful and other motivations for printing using erasable ink are known in the art.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-6652086, Tomida et al., 11-25-2003 : teaches an image erasing device, and image display apparatus and image recording apparatus equipped with the image erasing apparatus.

US-5299033, Wantanabe et al., 3-29-1994: teaches an image reading and recording apparatus with marking board and moveable scanning arm conveyed by a cable and drum arrangement.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Divine whose telephone number is 703-306-3440. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucas Divine  
Examiner  
Art Unit 2624

ljd

A handwritten signature in black ink, appearing to read 'K. Y. Poon', written in a cursive style.

**KING Y. POON  
PRIMARY EXAMINER**